

Grade 3
Subject Mathematics
Standard Mathematical Processes
Code GLE 0306.1.1
Grade/Course Level Expectation Use mathematical language, symbols, and definitions while developing mathematical reasoning.
Checks for Understanding
State Performance Indicators
Detail

General Skill(s)
 3,C,14: Addition Problems
 3,C,15: Subtraction Problems
 3,C,16: Multiplication Problems
 3,C,17: Division Problems
 3,C,24: Determining Reasonable Solutions
Skill Tree(s)
 5SB: Whole Numbers: Beginning
 16LG: Math Word Problems: Beginning
 86MC: Numeration K-3
 137SB: Math Strategies 1-3
 4LG: Number Facts: Advanced
 63LG: Number Facts: Beginning
 85MC: Number Sense K-3

Grade 3
Subject Mathematics
Standard Mathematical Processes
Code GLE 0306.1.2
Grade/Course Level Expectation Apply and adapt a variety of appropriate strategies to problem solving, including estimation, and reasonableness of the solution.
Checks for Understanding
State Performance Indicators
Detail

General Skill(s)
 3,C,14: Addition Problems
 3,C,15: Subtraction Problems
 3,C,16: Multiplication Problems
 3,C,17: Division Problems
 3,C,24: Determining Reasonable Solutions
 3,C,32: Estimation of Operations
Skill Tree(s)
 4LG: Number Facts: Advanced
 5SB: Whole Numbers: Beginning
 16LG: Math Word Problems: Beginning
 63LG: Number Facts: Beginning
 85MC: Number Sense K-3
 86MC: Numeration K-3
 137SB: Math Strategies 1-3

Grade 3
Subject Mathematics
Standard Mathematical Processes
Code GLE 0306.1.3
Grade/Course Level Expectation Develop independent reasoning to communicate mathematical ideas and derive algorithms and/or formulas.
Checks for Understanding
State Performance Indicators
Detail

General Skill(s)
 This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.
Skill Tree(s)
 Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

Grade 3
Subject Mathematics
Standard Mathematical Processes
Code GLE 0306.1.4
Grade/Course Level Expectation Move flexibly between concrete and abstract representations of mathematical ideas in order to solve problems, model mathematical ideas, and communicate solution strategies.
Checks for Understanding
State Performance Indicators
Detail

General Skill(s)
 3,C,14: Addition Problems
 3,C,15: Subtraction Problems
 3,C,16: Multiplication Problems
 3,C,17: Division Problems
 3,C,24: Determining Reasonable Solutions
 3,C,32: Estimation of Operations
Skill Tree(s)
 4LG: Number Facts: Advanced
 5SB: Whole Numbers: Beginning
 16LG: Math Word Problems: Beginning
 63LG: Number Facts: Beginning
 85MC: Number Sense K-3
 86MC: Numeration K-3
 137SB: Math Strategies 1-3

Grade	3	General Skill(s)
Subject	Mathematics	3,C,13: Bar & Picture Graphs
Standard	Mathematical Processes	3,C,14: Addition Problems
Code	GLE 0306.1.5	3,C,15: Subtraction Problems
Grade/Course Level Expectation	Use mathematical ideas and processes in different settings to formulate patterns, analyze graphs, set up and solve problems and interpret solutions.	3,C,16: Multiplication Problems
Checks for Understanding		3,C,17: Division Problems
State Performance Indicators		3,C,24: Determining Reasonable Solutions
Detail		3,C,32: Estimation of Operations
		Skill Tree(s)
		4LG: Number Facts: Advanced
		5SB: Whole Numbers: Beginning
		16LG: Math Word Problems: Beginning
		63LG: Number Facts: Beginning
		85MC: Number Sense K-3
		86MC: Numeration K-3
		90MC: Data Management and Probability K-3
		137SB: Math Strategies 1-3

Grade	3	General Skill(s)
Subject	Mathematics	This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.
Standard	Mathematical Processes	
Code	GLE 0306.1.6	
Grade/Course Level Expectation	Read and interpret the language of mathematics and use written/oral communication to express mathematical ideas precisely.	Skill Tree(s)
Checks for Understanding		Orchard Skill Trees are not currently correlated to this specific standard. See above for details.
State Performance Indicators		
Detail		

Grade 3
Subject Mathematics
Standard Mathematical Processes
Code GLE 0306.1.7
Grade/Course Level Expectation Recognize the historical development of mathematics, mathematics in context, and the connections between mathematics and the real world.

Checks for Understanding

State Performance Indicators

Detail

General Skill(s)
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Skill Tree(s)
Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

Grade 3
Subject Mathematics
Standard Mathematical Processes
Code GLE 0306.1.8
Grade/Course Level Expectation Use technologies/manipulatives appropriately to develop understanding of mathematical algorithms, to facilitate problem solving, and to create accurate and reliable models of mathematical concepts.

Checks for Understanding

State Performance Indicators

Detail

General Skill(s)
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Skill Tree(s)
Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

Grade	3	General Skill(s)
Subject	Mathematics	3,C,11: Using Measurement
Standard	Mathematical Processes	Skill Tree(s)
Code	0306.1.1	88MC: Measurement 2-3 137SB: Math Strategies 1-3
Grade/Course Level Expectation		
Checks for Understanding	Read and write time to the nearest minute.	
State Performance Indicators		
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	3,C,28: Money Applications
Standard	Mathematical Processes	Skill Tree(s)
Code	0306.1.2	2LG: Money 88MC: Measurement 2-3 137SB: Math Strategies 1-3
Grade/Course Level Expectation		
Checks for Understanding	Compare and order decimal amounts in the context of money.	
State Performance Indicators		
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	3,C,28: Money Applications
Standard	Mathematical Processes	Skill Tree(s)
Code	0306.1.3	2LG: Money
Grade/Course Level Expectation		88MC: Measurement 2-3
Checks for Understanding	Count the value of combinations of coins and bills up to five dollars.	137SB: Math Strategies 1-3
State Performance Indicators		
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	3,C,3: Skip Counting
Standard	Mathematical Processes	3,C,6: Patterning
Code	0306.1.4	Skill Tree(s)
Grade/Course Level Expectation		85MC: Number Sense K-3
Checks for Understanding	Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, and observing patterns.	91MC: Patterning and Algebra K-3
State Performance Indicators		137SB: Math Strategies 1-3
Detail		

Grade	3	General Skill(s)	
Subject	Mathematics	3,C,33: Word Problems	
Standard	Mathematical Processes	Skill Tree(s)	
Code	0306.1.5	16LG: Math Word Problems: Beginning	
Grade/Course Level Expectation		137SB: Math Strategies 1-3	
Checks for Understanding	Determine when and how to break a problem into simpler parts.		
State Performance Indicators			
Detail			

Grade	3	General Skill(s)	
Subject	Mathematics	3,C,32: Estimation of Operations	
Standard	Mathematical Processes	Skill Tree(s)	
Code	0306.1.6	85MC: Number Sense K-3	
Grade/Course Level Expectation		86MC: Numeration K-3	
		137SB: Math Strategies 1-3	
Checks for Understanding	Use estimation to check answers for reasonableness, and calculators to check for accuracy.		
State Performance Indicators			
Detail			

Grade 3
Subject Mathematics
Standard Mathematical Processes
Code 0306.1.7
Grade/Course Level Expectation
Checks for Understanding Make and investigate mathematical conjectures.

General Skill(s)
3,C,32: Estimation of Operations

Skill Tree(s)
85MC: Number Sense K-3
86MC: Numeration K-3
137SB: Math Strategies 1-3

State Performance Indicators

Detail

Grade 3
Subject Mathematics
Standard Mathematical Processes
Code 0306.1.8
Grade/Course Level Expectation
Checks for Understanding Explain and justify answers on the basis of mathematical properties, structures, and relationships.

General Skill(s)
3,C,5: Number Sentences: Missing Elements

Skill Tree(s)
3LG: Number Facts: Beginning
16LG: Math Word Problems: Beginning
63LG: Number Facts: Beginning
86MC: Numeration K-3
137SB: Math Strategies 1-3

State Performance Indicators

Detail

Grade 3
Subject Mathematics
Standard Mathematical Processes
Code 0306.1.9
Grade/Course Level Expectation
Checks for Understanding Use manipulatives to demonstrate that the commutative property holds for addition but not for subtraction.
State Performance Indicators
Detail

General Skill(s)
3,C,100: Properties of Addition*
Skill Tree(s)
5SB: Whole Numbers: Beginning
63LG: Number Facts: Mixed Practice
86MC: Numeration K-3

Grade 3
Subject Mathematics
Standard Mathematical Processes
Code 0306.1.10
Grade/Course Level Expectation
Checks for Understanding Use correct, clearly written and oral mathematical language to pose questions and communicate ideas.
State Performance Indicators
Detail

General Skill(s)
This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.
Skill Tree(s)
Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

Grade	3	General Skill(s)
Subject	Mathematics	3,C,11: Using Measurement
Standard	Mathematical Processes	Skill Tree(s)
Code	0306.1.11	88MC: Measurement 2-3 137SB: Math Strategies 1-3
Grade/Course Level Expectation		
Checks for Understanding	Develop strategies for solving problems involving addition and subtraction of measurements.	
State Performance Indicators		
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.
Standard	Mathematical Processes	Skill Tree(s)
Code	0306.1.12	Orchard Skill Trees are not currently correlated to this specific standard. See above for details.
Grade/Course Level Expectation		
Checks for Understanding	Analyze and evaluate the mathematical thinking and strategies of others.	
State Performance Indicators		
Detail		

Grade	3	General Skill(s)	
Subject	Mathematics	3,C,13: Bar & Picture Graphs	
Standard	Mathematical Processes	Skill Tree(s)	
Code	0306.1.13	90MC: Data Management and Probability K-3	
Grade/Course Level Expectation		137SB: Math Strategies 1-3	
Checks for Understanding	Create and use representations to organize, record, and communicate mathematical ideas.		
State Performance Indicators			
Detail			

Grade	3	General Skill(s)	
Subject	Mathematics	3,C,33: Word Problems	
Standard	Mathematical Processes	Skill Tree(s)	
Code	0306.1.14	16LG: Math Word Problems: Beginning	
Grade/Course Level Expectation		137SB: Math Strategies 1-3	
Checks for Understanding	Use age-appropriate books, stories, and videos to convey ideas of mathematics.		
State Performance Indicators			
Detail			

Grade	3	General Skill(s)	
Subject	Mathematics		This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.
Standard	Mathematical Processes		
Code	SPI 0306.1.1		
Grade/Course Level Expectation		Skill Tree(s)	Orchard Skill Trees are not currently correlated to this specific standard. See above for details.
Checks for Understanding			
State Performance Indicators	Solve problems using a calendar.		
Detail			

Grade	3	General Skill(s)	
Subject	Mathematics		3,C,34: Elapsed Time
Standard	Mathematical Processes	Skill Tree(s)	
Code	SPI 0306.1.2		1LG: Time 88MC: Measurement 2-3 137SB: Math Strategies 1-3
Grade/Course Level Expectation			
Checks for Understanding			
State Performance Indicators	Solve problems involving elapsed time.		
Detail			

Grade	3	General Skill(s)
Subject	Mathematics	3,C,28: Money Applications 3,C,103: Monetary Values*
Standard	Mathematical Processes	
Code	SPI 0306.1.3	Skill Tree(s)
Grade/Course Level Expectation		2LG: Money 88MC: Measurement 2-3 137SB: Math Strategies 1-3
Checks for Understanding		
State Performance Indicators	Determine the correct change from a transaction less than a dollar.	
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	3,C,4: Fraction Models
Standard	Mathematical Processes	
Code	SPI 0306.1.4	Skill Tree(s)
Grade/Course Level Expectation		137SB: Math Strategies 1-3
Checks for Understanding		
State Performance Indicators	Match the spoken, written, concrete, and pictorial representations of fractions with denominators up to ten.	
Detail		

Grade	3	General Skill(s)	3,C,102: Expressions*
Subject	Mathematics		
Standard	Mathematical Processes	Skill Tree(s)	4LG: Number Facts: Advanced 5SB: Whole Numbers: Beginning 16LG: Math Word Problems: Beginning 63LG: Number Facts: Mixed Practice 86MC: Numeration K-3 213MC: Principles of Math: Advanced
Code	SPI 0306.1.5		
Grade/Course Level Expectation			
Checks for Understanding			
State Performance Indicators	Represent problems mathematically using diagrams, numbers, and symbolic expressions.		
Detail			

Grade	3	General Skill(s)	3,C,9: 2-D & 3-D Figures
Subject	Mathematics		
Standard	Mathematical Processes	Skill Tree(s)	89MC: Geometry K-3 137SB: Math Strategies 1-3
Code	SPI 0306.1.6		
Grade/Course Level Expectation			
Checks for Understanding			
State Performance Indicators	Identify and use vocabulary to describe attributes of two- and three-dimensional shapes.		
Detail			

Grade	3	General Skill(s)
Subject	Mathematics	3,C,11: Using Measurement 3,C,12: Metric & Customary Measurement
Standard	Mathematical Processes	
Code	SPI 0306.1.7	Skill Tree(s)
Grade/Course Level Expectation		88MC: Measurement 2-3 137SB: Math Strategies 1-3
Checks for Understanding		
State Performance Indicators	Select appropriate units and tools to solve problems involving measures.	
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	3,C,13: Bar & Picture Graphs 3,C,22: Charts & Graphs
Standard	Mathematical Processes	
Code	SPI 0306.1.8	Skill Tree(s)
Grade/Course Level Expectation		90MC: Data Management and Probability K-3 137SB: Math Strategies 1-3
Checks for Understanding		
State Performance Indicators	Express answers clearly in verbal, numerical, or graphical (bar and picture) form, using units when appropriate.	
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	3,C,2: Place Value
Standard	Number and Operations	3,C,41: Standard & Expanded Number Forms II
Code	GLE 0306.2.1	Skill Tree(s)
Grade/Course Level Expectation	Understand the place value of whole numbers to ten-thousands place including expanded notation for all arithmetic operations.	2LG: Money
Checks for Understanding		85MC: Number Sense K-3
State Performance Indicators		137SB: Math Strategies 1-3
Detail		213MC: Principles of Math: Advanced

Grade	3	General Skill(s)
Subject	Mathematics	3,C,16: Multiplication Problems
Standard	Number and Operations	3,C,31: Multiplication (Computation)
Code	GLE 0306.2.2	3,C,150: Multiplication and Division Concepts*
Grade/Course Level Expectation	Develop understanding of multiplication and related division facts through multiple strategies and representations.	Skill Tree(s)
Checks for Understanding		4LG: Number Facts: Advanced
State Performance Indicators		16LG: Math Word Problems: Beginning
Detail		63LG: Number Facts: Beginning
		86MC: Numeration K-3
		137SB: Math Strategies 1-3
		213MC: Principles of Math: Advanced

Grade 3
Subject Mathematics
Standard Number and Operations
Code GLE 0306.2.3
Grade/Course Level Expectation Relate multiplication and division as inverse operations.
Checks for Understanding

State Performance Indicators

Detail

General Skill(s)
 3,C,16: Multiplication Problems
 3,C,31: Multiplication (Computation)
 3,C,150: Multiplication and Division Concepts*

Skill Tree(s)
 4LG: Number Facts: Advanced
 16LG: Math Word Problems: Beginning
 63LG: Number Facts: Beginning
 86MC: Numeration K-3
 137SB: Math Strategies 1-3
 213MC: Principles of Math: Advanced

Grade 3
Subject Mathematics
Standard Number and Operations
Code GLE 0306.2.4
Grade/Course Level Expectation Solve multiplication and division problems using various representations.
Checks for Understanding

State Performance Indicators

Detail

General Skill(s)
 3,C,16: Multiplication Problems
 3,C,31: Multiplication (Computation)
 3,C,150: Multiplication and Division Concepts*

Skill Tree(s)
 4LG: Number Facts: Advanced
 16LG: Math Word Problems: Beginning
 63LG: Number Facts: Beginning
 86MC: Numeration K-3
 137SB: Math Strategies 1-3
 213MC: Principles of Math: Advanced

Grade 3
Subject Mathematics
Standard Number and Operations
Code GLE 0306.2.5
Grade/Course Level Expectation Understand the meaning and uses of fractions.
Checks for Understanding

State Performance Indicators

Detail

General Skill(s)
3,C,4: Fraction Models
3,C,38: Fractions & Decimals Ordering

Skill Tree(s)
137SB: Math Strategies 1-3

Grade 3
Subject Mathematics
Standard Number and Operations
Code GLE 0306.2.6
Grade/Course Level Expectation Use various strategies and models to compare and order fractions and identify equivalent fractions.
Checks for Understanding

State Performance Indicators

Detail

General Skill(s)
3,C,4: Fraction Models
3,C,38: Fractions & Decimals Ordering

Skill Tree(s)
137SB: Math Strategies 1-3

Orchard Correlation to the Tennessee Curriculum Standards



Grade 3
Subject Mathematics
Standard Number and Operations
Code GLE 0306.2.7
Grade/Course Level Expectation Add and subtract fractions with like denominators using various models.
Checks for Understanding

State Performance Indicators

Detail

General Skill(s)
3,C,4: Fraction Models
3,C,38: Fractions & Decimals Ordering

Skill Tree(s)
137SB: Math Strategies 1-3

Grade 3
Subject Mathematics
Standard Number and Operations
Code 0306.2.1
Grade/Course Level Expectation
Checks for Understanding Represent whole numbers up to 10,000 using various models (such as base-ten blocks, number lines, place-value charts) and in standard form, written form, and expanded form.

State Performance Indicators

Detail

General Skill(s)
3,C,2: Place Value
3,C,41: Standard & Expanded Number Forms II

Skill Tree(s)
2LG: Money
85MC: Number Sense K-3
137SB: Math Strategies 1-3
213MC: Principles of Math: Advanced

Grade 3
Subject Mathematics
Standard Number and Operations
Code 0306.2.2
Grade/Course Level Expectation
Checks for Understanding Understand and use the symbols =, < and > to signify order and comparison.

General Skill(s)
3,C,1: Whole Number Comparisons

Skill Tree(s)
85MC: Number Sense K-3
91MC: Patterning and Algebra K-3
137SB: Math Strategies 1-3

State Performance Indicators

Detail

Grade 3
Subject Mathematics
Standard Number and Operations
Code 0306.2.3
Grade/Course Level Expectation
Checks for Understanding Use parentheses to indicate grouping.

General Skill(s)
This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.

Skill Tree(s)
Orchard Skill Trees are not currently correlated to this specific standard. See above for details.

State Performance Indicators

Detail

Grade 3
Subject Mathematics
Standard Number and Operations
Code 0306.2.4
Grade/Course Level Expectation
Checks for Understanding Use a variety of methods to perform mental computations and compare the efficiency of those methods.
State Performance Indicators
Detail

General Skill(s)
3,C,18: Estimating I
3,C,32: Estimation of Operations

Skill Tree(s)
85MC: Number Sense K-3
86MC: Numeration K-3
137SB: Math Strategies 1-3

Grade 3
Subject Mathematics
Standard Number and Operations
Code 0306.2.5
Grade/Course Level Expectation
Checks for Understanding Use highest order value (such as tens or hundreds digit) to make simple estimates.
State Performance Indicators
Detail

General Skill(s)
3,C,18: Estimating I
3,C,32: Estimation of Operations

Skill Tree(s)
85MC: Number Sense K-3
86MC: Numeration K-3
137SB: Math Strategies 1-3

Grade 3
Subject Mathematics
Standard Number and Operations
Code 0306.2.6
Grade/Course Level Expectation
Checks for Understanding Solve a variety of addition and subtraction story problems including those with irrelevant information.

General Skill(s)
3,C,14: Addition Problems
3,C,15: Subtraction Problems

Skill Tree(s)
5SB: Whole Numbers: Beginning
16LG: Math Word Problems: Beginning
86MC: Numeration K-3
137SB: Math Strategies 1-3

State Performance Indicators

Detail

Grade 3
Subject Mathematics
Standard Number and Operations
Code 0306.2.7
Grade/Course Level Expectation
Checks for Understanding Represent multiplication using various representations such as equal-size groups, arrays, area models, and equal jumps on number lines.

General Skill(s)
3,C,16: Multiplication Problems
3,C,31: Multiplication (Computation)

Skill Tree(s)
4LG: Number Facts: Advanced
16LG: Math Word Problems: Beginning
63LG: Number Facts: Beginning
86MC: Numeration K-3
137SB: Math Strategies 1-3
213MC: Principles of Math: Advanced

State Performance Indicators

Detail

Grade	3	General Skill(s)	
Subject	Mathematics		3,C,150: Multiplication and Division Concepts*
Standard	Number and Operations	Skill Tree(s)	
Code	0306.2.8		86MC: Numeration K-3 213MC: Principles of Math: Advanced
Grade/Course Level Expectation			
Checks for Understanding	Represent division using various representations such as successive subtraction, the number of equal jumps, partitioning, and sharing.		
State Performance Indicators			
Detail			

Grade	3	General Skill(s)	
Subject	Mathematics		3,C,150: Multiplication and Division Concepts*
Standard	Number and Operations	Skill Tree(s)	
Code	0306.2.9		86MC: Numeration K-3 213MC: Principles of Math: Advanced
Grade/Course Level Expectation			
Checks for Understanding	Describe contexts for multiplication and division facts.		
State Performance Indicators			
Detail			

Grade	3	General Skill(s)	
Subject	Mathematics	3,C,4: Fraction Models	
Standard	Number and Operations	Skill Tree(s)	
Code	0306.2.10	137SB: Math Strategies 1-3	
Grade/Course Level Expectation			
Checks for Understanding	Understand that symbols such as $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$ represent numbers called unit fractions.		
State Performance Indicators			
Detail			

Grade	3	General Skill(s)	
Subject	Mathematics	3,C,4: Fraction Models	
Standard	Number and Operations	3,C,38: Fractions & Decimals Ordering	
Code	0306.2.11	Skill Tree(s)	
Grade/Course Level Expectation		137SB: Math Strategies 1-3	
Checks for Understanding	Identify fractions as parts of whole units, as parts of sets, as locations on number lines, and as division of two whole numbers.		
State Performance Indicators			
Detail			

Grade	3	General Skill(s)
Subject	Mathematics	3,C,4: Fraction Models 3,C,38: Fractions & Decimals Ordering
Standard	Number and Operations	
Code	0306.2.12	Skill Tree(s)
Grade/Course Level Expectation		137SB: Math Strategies 1-3
Checks for Understanding	Compare fractions using drawings, concrete objects, and benchmark fractions.	
State Performance Indicators		
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	3,C,4: Fraction Models 3,C,38: Fractions & Decimals Ordering
Standard	Number and Operations	
Code	0306.2.13	Skill Tree(s)
Grade/Course Level Expectation		137SB: Math Strategies 1-3
Checks for Understanding	Understand that when a whole is divided into equal parts to create unit fractions, the sum of all the parts adds up to one.	
State Performance Indicators		
Detail		

Grade	3	General Skill(s)	
Subject	Mathematics		3,C,41: Standard & Expanded Number Forms II
Standard		Skill Tree(s)	
Code	SPI 0306.2.1		137SB: Math Strategies 1-3
Grade/Course Level Expectation			
Checks for Understanding			
State Performance Indicators	Read and write numbers up to 10,000 in numerals and up to 1,000 in words.		
Detail			

Grade	3	General Skill(s)	
Subject	Mathematics		3,C,2: Place Value 3,C,41: Standard & Expanded Number Forms II
Standard		Skill Tree(s)	
Code	SPI 0306.2.2		2LG: Money 85MC: Number Sense K-3 137SB: Math Strategies 1-3 213MC: Principles of Math: Advanced
Grade/Course Level Expectation			
Checks for Understanding			
State Performance Indicators	Identify the place value of numbers in the ten-thousands, thousands, hundreds, tens, and ones positions.		
Detail			

Grade	3	General Skill(s)	
Subject	Mathematics	3,C,41: Standard & Expanded Number Forms II	
Standard		Skill Tree(s)	
Code	SPI 0306.2.3	137SB: Math Strategies 1-3	
Grade/Course Level Expectation			
Checks for Understanding			
State Performance Indicators	Convert between expanded and standard form with whole numbers to 10,000.		
Detail			

Grade	3	General Skill(s)	
Subject	Mathematics	3,C,1: Whole Number Comparisons	
Standard		Skill Tree(s)	
Code	SPI 0306.2.4	85MC: Number Sense K-3	
Grade/Course Level Expectation		91MC: Patterning and Algebra K-3	
Checks for Understanding		137SB: Math Strategies 1-3	
State Performance Indicators	Compare and order numbers up to 10,000 using the words less than, greater than, and equal to, and the symbols $<$, $>$, $=$.		
Detail			

Grade	3	General Skill(s)	3,C,150: Multiplication and Division Concepts*
Subject	Mathematics		3,C,16: Multiplication Problems
Standard			
Code	SPI 0306.2.5	Skill Tree(s)	4LG: Number Facts: Advanced
Grade/Course Level Expectation			16LG: Math Word Problems: Beginning
Checks for Understanding			63LG: Number Facts: Beginning
			86MC: Numeration K-3
			137SB: Math Strategies 1-3
			213MC: Principles of Math: Advanced
State Performance Indicators	Identify various representations of multiplication and division.		
Detail			

Grade	3	General Skill(s)	3,C,16: Multiplication Problems
Subject	Mathematics		3,C,150: Multiplication and Division Concepts*
Standard			
Code	SPI 0306.2.6	Skill Tree(s)	4LG: Number Facts: Advanced
Grade/Course Level Expectation			16LG: Math Word Problems: Beginning
Checks for Understanding			63LG: Number Facts: Beginning
			86MC: Numeration K-3
			137SB: Math Strategies 1-3
			213MC: Principles of Math: Advanced
State Performance Indicators	Recall basic multiplication facts through 10 times10 and the related division facts.		
Detail			

Grade 3
Subject Mathematics
Standard
Code SPI 0306.2.7
Grade/Course Level Expectation
Checks for Understanding

State Performance Indicators Compute multiplication problems that involve multiples of ten using basic number facts.

Detail

General Skill(s)
3,C,16: Multiplication Problems

Skill Tree(s)
4LG: Number Facts: Advanced
16LG: Math Word Problems: Beginning
63LG: Number Facts: Beginning
86MC: Numeration K-3
137SB: Math Strategies 1-3

Grade 3
Subject Mathematics
Standard
Code SPI 0306.2.8
Grade/Course Level Expectation
Checks for Understanding

State Performance Indicators Solve problems that involve the inverse relationship between multiplication and division.

Detail

General Skill(s)
3,C,16: Multiplication Problems
3,C,150: Multiplication and Division Concepts*

Skill Tree(s)
4LG: Number Facts: Advanced
16LG: Math Word Problems: Beginning
63LG: Number Facts: Beginning
86MC: Numeration K-3
137SB: Math Strategies 1-3
213MC: Principles of Math: Advanced

Grade	3	General Skill(s)
Subject	Mathematics	3,C,29: Addition (Computation) 3,C,30: Subtraction (Computation)
Standard		
Code	SPI 0306.2.9	Skill Tree(s)
Grade/Course Level Expectation		3LG: Number Facts: Beginning 5SB: Whole Numbers: Beginning 63LG: Number Facts: Beginning 213MC: Principles of Math: Advanced
Checks for Understanding		
State Performance Indicators	Solve contextual problems involving the addition (with and without regrouping) and subtraction (with and without regrouping) of two- and three digit whole numbers.	
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	3,C,4: Fraction Models 3,C,38: Fractions & Decimals Ordering
Standard		
Code	SPI 0306.2.10	Skill Tree(s)
Grade/Course Level Expectation		137SB: Math Strategies 1-3
Checks for Understanding		
State Performance Indicators	Identify equivalent fractions given by various representations.	
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	3,C,4: Fraction Models 3,C,38: Fractions & Decimals Ordering
Standard		
Code	SPI 0306.2.11	Skill Tree(s)
Grade/Course Level Expectation		137SB: Math Strategies 1-3
Checks for Understanding		
State Performance Indicators	Recognize and use different interpretations of fractions.	
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	3,C,4: Fraction Models 3,C,38: Fractions & Decimals Ordering
Standard		
Code	SPI 0306.2.12	Skill Tree(s)
Grade/Course Level Expectation		137SB: Math Strategies 1-3
Checks for Understanding		
State Performance Indicators	Name fractions in various contexts that are less than, equal to, or greater than one.	
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	3,C,4: Fraction Models
Standard		3,C,38: Fractions & Decimals Ordering
Code	SPI 0306.2.13	Skill Tree(s)
Grade/Course Level Expectation		137SB: Math Strategies 1-3
Checks for Understanding		
State Performance Indicators	Recognize, compare, and order fractions (benchmark fractions, common numerators, or common denominators).	
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	3,C,4: Fraction Models
Standard		3,C,38: Fractions & Decimals Ordering
Code	SPI 0306.2.14	Skill Tree(s)
Grade/Course Level Expectation		137SB: Math Strategies 1-3
Checks for Understanding		
State Performance Indicators	Add and subtract fractions with like denominators.	
Detail		

Grade 3
Subject Mathematics
Standard Algebra
Code GLE 0306.3.1
Grade/Course Level Expectation Develop meaning for and apply the commutative, associative, and distributive properties using various representations.
Checks for Understanding

State Performance Indicators

Detail

General Skill(s)
 3,C,5: Number Sentences: Missing Elements
 3,C,16: Multiplication Problems
 3,C,17: Division Problems

Skill Tree(s)
 3LG: Number Facts: Beginning
 4LG: Number Facts: Advanced
 16LG: Math Word Problems: Beginning
 63LG: Number Facts: Beginning
 86MC: Numeration K-3
 137SB: Math Strategies 1-3

Grade 3
Subject Mathematics
Standard Algebra
Code GLE 0306.3.2
Grade/Course Level Expectation Develop understanding that a letter or a symbol can represent an unknown quantity in a simple mathematical expression/equation.
Checks for Understanding

State Performance Indicators

Detail

General Skill(s)
 3,C,5: Number Sentences: Missing Elements

Skill Tree(s)
 3LG: Number Facts: Beginning
 16LG: Math Word Problems: Beginning
 63LG: Number Facts: Beginning
 86MC: Numeration K-3
 137SB: Math Strategies 1-3

Grade 3
Subject Mathematics
Standard Algebra
Code GLE 0306.3.3
Grade/Course Level Expectation Describe and analyze patterns and relationships in contexts.
Checks for Understanding

General Skill(s)
3,C,6: Patterning
3,C,114: Identifying & Continuing Patterns*

Skill Tree(s)
91MC: Patterning and Algebra K-3
137SB: Math Strategies 1-3

State Performance Indicators

Detail

Grade 3
Subject Mathematics
Standard Algebra
Code GLE 0306.3.4
Grade/Course Level Expectation Create and represent patterns using words, tables, graphs, and symbols.
Checks for Understanding

General Skill(s)
3,C,6: Patterning
3,C,114: Identifying & Continuing Patterns*

Skill Tree(s)
91MC: Patterning and Algebra K-3
137SB: Math Strategies 1-3

State Performance Indicators

Detail

Grade 3
Subject Mathematics
Standard Algebra
Code 0306.3.1
Grade/Course Level Expectation
Checks for Understanding Show that addition and multiplication are commutative operations.

General Skill(s)
3,C,5: Number Sentences: Missing Elements

Skill Tree(s)
3LG: Number Facts: Beginning
16LG: Math Word Problems: Beginning
63LG: Number Facts: Beginning
86MC: Numeration K-3
137SB: Math Strategies 1-3

State Performance Indicators

Detail

Grade 3
Subject Mathematics
Standard Algebra
Code 0306.3.2
Grade/Course Level Expectation
Checks for Understanding Show that subtraction and division are not commutative operations.

General Skill(s)
3,C,17: Division Problems

Skill Tree(s)
4LG: Number Facts: Advanced
16LG: Math Word Problems: Beginning
63LG: Number Facts: Beginning
86MC: Numeration K-3
137SB: Math Strategies 1-3

State Performance Indicators

Detail

Grade 3
Subject Mathematics
Standard Algebra
Code 0306.3.3
Grade/Course Level Expectation
Checks for Understanding Use commutative, associative, and distributive properties to multiply whole numbers.

General Skill(s)
3,C,5: Number Sentences: Missing Elements
3,C,16: Multiplication Problems

Skill Tree(s)
3LG: Number Facts: Beginning
4LG: Number Facts: Advanced
16LG: Math Word Problems: Beginning
63LG: Number Facts: Beginning
86MC: Numeration K-3
137SB: Math Strategies 1-3

State Performance Indicators

Detail

Grade 3
Subject Mathematics
Standard Algebra
Code 0306.3.4
Grade/Course Level Expectation
Checks for Understanding Solve problems using the commutative, associative, and distributive properties.

General Skill(s)
3,C,5: Number Sentences: Missing Elements

Skill Tree(s)
3LG: Number Facts: Beginning
16LG: Math Word Problems: Beginning
63LG: Number Facts: Beginning
86MC: Numeration K-3
137SB: Math Strategies 1-3

State Performance Indicators

Detail

Grade 3
Subject Mathematics
Standard Algebra
Code 0306.3.5
Grade/Course Level Expectation
Checks for Understanding Find unknowns in number sentences and problems involving addition, subtraction, multiplication, or division.
State Performance Indicators
Detail

General Skill(s)
3,C,5: Number Sentences: Missing Elements
Skill Tree(s)
3LG: Number Facts: Beginning
16LG: Math Word Problems: Beginning
63LG: Number Facts: Beginning
86MC: Numeration K-3
137SB: Math Strategies 1-3

Grade 3
Subject Mathematics
Standard Algebra
Code 0306.3.6
Grade/Course Level Expectation
Checks for Understanding Analyze patterns in words, tables, and graphs to draw conclusions.
State Performance Indicators
Detail

General Skill(s)
3,C,6: Patterning
3,C,114: Identifying & Continuing Patterns*
Skill Tree(s)
91MC: Patterning and Algebra K-3
137SB: Math Strategies 1-3

Grade 3
Subject Mathematics
Standard Algebra
Code 0306.3.7
Grade/Course Level Expectation
Checks for Understanding Create different representations of a pattern given a verbal description.

General Skill(s)
3,C,6: Patterning
3,C,114: Identifying & Continuing Patterns*

Skill Tree(s)
91MC: Patterning and Algebra K-3
137SB: Math Strategies 1-3

State Performance Indicators

Detail

Grade 3
Subject Mathematics
Standard Algebra
Code 0306.3.8
Grade/Course Level Expectation
Checks for Understanding Analyze patterns in quantitative change resulting from computation.

General Skill(s)
3,C,6: Patterning
3,C,114: Identifying & Continuing Patterns*

Skill Tree(s)
91MC: Patterning and Algebra K-3
137SB: Math Strategies 1-3

State Performance Indicators

Detail

Grade	3	General Skill(s)	3,C,5: Number Sentences: Missing Elements
Subject	Mathematics		
Standard		Skill Tree(s)	3LG: Number Facts: Beginning 16LG: Math Word Problems: Beginning 63LG: Number Facts: Beginning 86MC: Numeration K-3 137SB: Math Strategies 1-3
Code	SPI 0306.3.1		
Grade/Course Level Expectation			
Checks for Understanding			
State Performance Indicators	Verify a conclusion using algebraic properties.		
Detail			

Grade	3	General Skill(s)	3,C,19: Number Sentences I 3,C,20: Number Sentences II 3,C,21: Number Sentences Using Graphics
Subject	Mathematics		
Standard		Skill Tree(s)	3LG: Number Facts: Beginning 4LG: Number Facts: Advanced 5SB: Whole Numbers: Beginning 16LG: Math Word Problems: Beginning 63LG: Number Facts: Beginning 86MC: Numeration K-3 137SB: Math Strategies 1-3 213MC: Principles of Math: Advanced
Code	SPI 0306.3.2		
Grade/Course Level Expectation			
Checks for Understanding			
State Performance Indicators	Express mathematical relationships using number sentences/equations.		
Detail			

Grade 3
Subject Mathematics
Standard
Code SPI 0306.3.3
Grade/Course Level Expectation
Checks for Understanding
State Performance Indicators Find the missing values in simple multiplication and division equations.
Detail

General Skill(s)
3,C,101: Properties of Multiplication*
3,C,16: Multiplication Problems
3,C,17: Division Problems
Skill Tree(s)
4LG: Number Facts: Advanced
63LG: Number Facts: Mixed Practice
213MC: Principles of Math: Advanced
4LG: Number Facts: Advanced
16LG: Math Word Problems: Beginning
63LG: Number Facts: Beginning
86MC: Numeration K-3
137SB: Math Strategies 1-3

Grade 3
Subject Mathematics
Standard
Code SPI 0306.3.4
Grade/Course Level Expectation
Checks for Understanding
State Performance Indicators Describe or extend (including finding missing terms) geometric and numeric patterns.
Detail

General Skill(s)
3,C,6: Patterning
3,C,104: Geometric Models*
Skill Tree(s)
137SB: Math Strategies 1-3
88MC: Measurement 2-3
91MC: Patterning and Algebra K-3

Grade 3
Subject Mathematics
Standard Geometry and Measurement
Code GLE 0306.4.1
Grade/Course Level Expectation Describe, compare, and analyze properties of polygons.
Checks for Understanding

General Skill(s)
3,C,9: 2-D & 3-D Figures
Skill Tree(s)
89MC: Geometry K-3
137SB: Math Strategies 1-3

State Performance Indicators

Detail

Grade 3
Subject Mathematics
Standard Geometry and Measurement
Code GLE 0306.4.2
Grade/Course Level Expectation Understand and apply the concepts of congruence and symmetry.
Checks for Understanding

General Skill(s)
3,C,8: Classifying Objects
3,C,9: 2-D & 3-D Figures
3,C,35: Geometry Spatial Sense
Skill Tree(s)
89MC: Geometry K-3
137SB: Math Strategies 1-3

State Performance Indicators

Detail

Grade	3	General Skill(s)
Subject	Mathematics	3,C,9: 2-D & 3-D Figures
Standard	Geometry and Measurement	Skill Tree(s)
Code	GLE 0306.4.3	89MC: Geometry K-3
Grade/Course Level Expectation	Understand and use attributes of 2- and 3-dimensional figures to solve problems.	137SB: Math Strategies 1-3
Checks for Understanding		
State Performance Indicators		
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	3,C,11: Using Measurement
Standard	Geometry and Measurement	3,C,110: Measurement Concepts*
Code	GLE 0306.4.4	Skill Tree(s)
Grade/Course Level Expectation	Use appropriate units, strategies and tools to solve problems involving perimeter.	88MC: Measurement 2-3
Checks for Understanding		137SB: Math Strategies 1-3
State Performance Indicators		
Detail		

Grade 3
Subject Mathematics
Standard Geometry and Measurement
Code GLE 0306.4.5
Grade/Course Level Expectation Solve measurement problems involving fractional parts of linear units and capacity units.
Checks for Understanding

General Skill(s)
3,C,110: Measurement Concepts*
3,C,12: Metric & Customary Measurement
Skill Tree(s)
88MC: Measurement 2-3
137SB: Math Strategies 1-3

State Performance Indicators

Detail

Grade 3
Subject Mathematics
Standard Geometry and Measurement
Code 0306.4.1
Grade/Course Level Expectation
Checks for Understanding Describe properties of plane figures (such as circles, triangles, squares and rectangles) and solid shapes (such as spheres, cubes and cylinders).

General Skill(s)
3,C,8: Classifying Objects
3,C,9: 2-D & 3-D Figures
3,C,35: Geometry Spatial Sense
Skill Tree(s)
89MC: Geometry K-3
137SB: Math Strategies 1-3

State Performance Indicators

Detail

Grade	3	General Skill(s)	
Subject	Mathematics	3,C,9: 2-D & 3-D Figures	
Standard	Geometry and Measurement	Skill Tree(s)	
Code	0306.4.2	89MC: Geometry K-3	
Grade/Course Level Expectation		137SB: Math Strategies 1-3	
Checks for Understanding	Classify polygons according to the number of their sides and angles.		
State Performance Indicators			
Detail			

Grade	3	General Skill(s)	
Subject	Mathematics	This specific standard is either not effectively assessed or taught using technology, or is not addressed in this version of Orchard through content or assessments at this grade level.	
Standard	Geometry and Measurement	Skill Tree(s)	
Code	0306.4.3	Orchard Skill Trees are not currently correlated to this specific standard. See above for details.	
Grade/Course Level Expectation			
Checks for Understanding	Classify lines and segments as parallel, perpendicular, or intersecting.		
State Performance Indicators			
Detail			

Grade	3	General Skill(s)
Subject	Mathematics	3,C,109: Symmetry*
Standard	Geometry and Measurement	Skill Tree(s)
Code	0306.4.4	89MC: Geometry K-3
Grade/Course Level Expectation		
Checks for Understanding	Identify, create, and describe figures with line symmetry.	
State Performance Indicators		
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	3,C,11: Using Measurement 3,C,110: Measurement Concepts*
Standard	Geometry and Measurement	Skill Tree(s)
Code	0306.4.5	88MC: Measurement 2-3 137SB: Math Strategies 1-3
Grade/Course Level Expectation		
Checks for Understanding	Understand that all measurements require units.	
State Performance Indicators		
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	3,C,4: Fraction Models 3,C,11: Using Measurement
Standard	Geometry and Measurement	
Code	0306.4.6	Skill Tree(s)
Grade/Course Level Expectation		137SB: Math Strategies 1-3
Checks for Understanding	Recognize the use of fractions in liquid measures.	
State Performance Indicators		
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	3,C,11: Using Measurement
Standard	Geometry and Measurement	
Code	0306.4.7	Skill Tree(s)
Grade/Course Level Expectation		88MC: Measurement 2-3 137SB: Math Strategies 1-3
Checks for Understanding	Recognize the relationships among cups, pints, quarts, and gallons.	
State Performance Indicators		
Detail		

Grade 3
Subject Mathematics
Standard Geometry and Measurement
Code 0306.4.8
**Grade/Course
Level
Expectation**
**Checks
for
Understanding** Estimate and/or measure the capacity of a container.

General Skill(s)
3,C,12: Metric & Customary Measurement
3,C,110: Measurement Concepts*

Skill Tree(s)
88MC: Measurement 2-3
137SB: Math Strategies 1-3

**State
Performance
Indicators**

Detail

Grade 3
Subject Mathematics
Standard Geometry and Measurement
Code 0306.4.9
**Grade/Course
Level
Expectation**
**Checks
for
Understanding** Measure weight to the nearest ounce or gram.

General Skill(s)
3,C,12: Metric & Customary Measurement
3,C,110: Measurement Concepts*

Skill Tree(s)
88MC: Measurement 2-3
137SB: Math Strategies 1-3

**State
Performance
Indicators**

Detail

Grade 3
Subject Mathematics
Standard Geometry and Measurement
Code 0306.4.10
Grade/Course Level Expectation
Checks for Understanding Use reasonable units of length (i.e. kilometer, meter, centimeter; mile, yard, foot, inch) in estimates and measures.
State Performance Indicators
Detail

General Skill(s)
3,C,11: Using Measurement
3,C,12: Metric & Customary Measurement
3,C,110: Measurement Concepts*
Skill Tree(s)
88MC: Measurement 2-3
137SB: Math Strategies 1-3

Grade 3
Subject Mathematics
Standard Geometry and Measurement
Code 0306.4.11
Grade/Course Level Expectation
Checks for Understanding Know common equivalences for length (1 meter = 100 centimeters, 1 yard = 3 feet, 1 foot = 12 inches).
State Performance Indicators
Detail

General Skill(s)
3,C,12: Metric & Customary Measurement
3,C,110: Measurement Concepts*
Skill Tree(s)
88MC: Measurement 2-3
137SB: Math Strategies 1-3

Grade	3	General Skill(s)
Subject	Mathematics	3,C,11: Using Measurement
Standard	Geometry and Measurement	3,C,12: Metric & Customary Measurement
Code	0306.4.12	3,C,110: Measurement Concepts*
Grade/Course Level Expectation		Skill Tree(s)
Checks for Understanding	Make and record measurements that use mixed units within the same system of measurement (such as feet and inches, meters and centimeters).	88MC: Measurement 2-3
State Performance Indicators		137SB: Math Strategies 1-3
Detail		

Grade	3	General Skill(s)
Subject	Mathematics	3,C,11: Using Measurement
Standard	Geometry and Measurement	3,C,12: Metric & Customary Measurement
Code	0306.4.13	3,C,110: Measurement Concepts*
Grade/Course Level Expectation		Skill Tree(s)
Checks for Understanding	Use common abbreviations: km, m, cm, in, ft, yd, mi.	88MC: Measurement 2-3
State Performance Indicators		137SB: Math Strategies 1-3
Detail		

Grade	3	General Skill(s)	
Subject	Mathematics		3,C,10: Compare 2-D & 3-D Figures
Standard		Skill Tree(s)	
Code	SPI 0306.4.1		89MC: Geometry K-3 137SB: Math Strategies 1-3
Grade/Course Level Expectation			
Checks for Understanding			
State Performance Indicators	Recognize polygons and be able to identify examples based on geometric definitions.		
Detail			

Grade	3	General Skill(s)	
Subject	Mathematics		3,C,10: Compare 2-D & 3-D Figures
Standard		Skill Tree(s)	
Code	SPI 0306.4.2		89MC: Geometry K-3 137SB: Math Strategies 1-3
Grade/Course Level Expectation			
Checks for Understanding			
State Performance Indicators	Determine if two figures are congruent based on size and shape.		
Detail			
